

| | A | B | C | D | E | F | G | H | I | J | M |
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| 1 | Req | ARIMS M | Category | SubCategory | Component | ShortDescription | DateEntered | DateCompleted | LongDescription | Comments | Reviewer Comments |
| 2 | 37 | AV_ARIMS | Analysis Tools | Habitat Quality | | Redefined ODFW Summary Reach Tool | 12/16/2003 | | Tool: the ability to identify an upstream and downstream point, the tool then finds all of the ODFW habitat units on that stretch, uses the ODFW criteria to redefine the summary reaches. | Need Input: 1. Is an output report needed? If so, an example of the output is needed and a list of data elements. 2. Also need to investigate differences in the ODFW criteria between Westside/Eastside. | |
| 3 | 2 | AV_ARIMS | Analysis Tools | | Report/Map | Stream Miles Table | 12/16/2003 | | The ability to produce a table that summarizes stream miles for a selected set of reaches. The summary should be grouped by reach levels. | | |
| 4 | 38 | AV_ARIMS | Create Tools | Habitat Quality | | Redefined ODFW Summary Reaches | 12/16/2003 | | The ability to insert the redefined ODFW summary reaches into ARIMS. The new reaches should have a Level 1 value of Habitat Quality. | | |
| 5 | 79 | AV_ARIMS | Display Tools | | Report/Map | Fish Distribution Overlay | 12/16/2003 | | The ability to spatially overlay fish distribution data with habitat data. | | |
| 6 | 80 | AV_ARIMS | Display Tools | | Report/Map | Fish Distribution Spatial Display | 12/16/2003 | | The ability to create a map displaying Presence and Absence by species. | | |
| 7 | 21 | AV_ARIMS | Display Tools | | Report/Map | | 12/16/2003 | | The ability to overlay Fish Distribution with barriers to determine what species are affected by the barrier. | | |
| 8 | 78 | AV_ARIMS | Display Tools | Reach Type | Report/Map | Fish Distribution | 12/16/2003 | | The ability to map fish distribution by species. | | |
| 9 | 103 | AV_ARIMS | Display Tools | Reach Types | Report/Map | Display Fish Use | 12/16/2003 | | The ability to map Fish Use reaches. | | |
| 10 | 35 | AV_ARIMS | Display Tools | | Report/Map | Display Habitat Quality | 12/16/2003 | | The ability to spatially display the Habitat Quality reaches symbolized by the good, fair, poor rankings. | | |
| 11 | 46 | AV_ARIMS | Display Tools | | Report/Map | Display Reports | 12/16/2003 | | The ability to link to one or more PDF reports and display them. | Need Input: 1. Are the reports related to a reach/site or a whole stream? 2. What is the maximum size of the filename (character length)? 3. Are all the files in PDF format, or do other file formats need to be supported? 4. Do the users want to access the files from ArcView or from the data entry forms? 5. There should be a central (district) location for reports. District must specify the location. 6. There needs to be a process for ensuring no duplicate filenames. 7. Sample reports should be provided. | |
| 12 | 3 | AV_ARIMS | Display Tools | | Virtual Table | Map Product | 12/16/2003 | | The ability to add a table to a map that contains: Presence/Absence, Habitat, Population Strength, and Habitat Quality (Good, Medium, Low). | | |

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| 1 | ReqID | ARIMS Module | Category | SubCategory | Component | ShortDescription | DateEntered | DateCompleted | LongDescription | Comments | Reviewer Comments |
| 13 | 22 | Fish | Fish Use | Reach Type | | Fish Use | 12/16/2003 | | The reach type Fish Spawning Habitat should be changed to Fish Use. | | |
| 14 | 23 | Fish | Fish Use | Reach Type | Informational | Fish Use - Use Not Verified | 12/16/2003 | | Fish Use, Use Not Verified is described as "best professional judgment suggests use." | | |
| 15 | 24 | Fish | Fish Use | Reach Type | Informational | Fish Use - Use Verified | 12/16/2003 | | Fish Use, Use Verified is described as "use field verified/observed by reputable fish biologist." | | |
| 16 | 26 | Fish | Fish Use | Reach Type | | Fish Use Level 2 | 12/16/2003 | | The level 2 values for Fish Use reaches should be: Migratory, Winter Migratory, Spawning, Rearing, Spawning & Rearing, and Holding. | | |
| 17 | 27 | Fish | Fish Use | Reach Type | | Fish Use Level 3 | 12/16/2003 | | The level 3 values for Fish Use reaches should be: Use Verified and Use Not Verified. | | |
| 18 | 28 | Fish | Fish Use | Reach Type | | Fish Use Level 4 | 12/16/2003 | | The level 4 value for Fish Use reaches should be species code. | | |
| 19 | 29 | Fish | Fish Use | Reach Type | Informational | Fish Use Points | 12/16/2003 | | Fish Use is reach based data. To represent point data (ex. Spawning, Holding), the user should create very small reaches. | | |
| 20 | 106 | Fish | Fish Use | Reach Types | | Fish Use Level 1 | | | The system shall support entry and update for Fish Use reaches by type of use, <u>verification status and species.</u> | | |
| 21 | 74 | Fish | General Survey | All | Data Elements | General Survey Data Elements | 12/16/2003 | | System shall support entry and update of the following data elements pertinent for all fish surveys: LLID, Beg Index, End Index, Method 1, Method 2, Reach No (user assigned), Reach ID (system assigned), Comments, Investigator, Source, Purpose, Survey Begin Date, Survey End Date. | | |
| 22 | 48 | Fish | General Survey | All | Data Elements | Linking Field | 12/16/2003 | | A text field to reference to indicate the location of additional information. | Need Input: Is it acceptable to the user group to use the comments field for this information? | |
| 23 | 89 | Fish | General Survey | All | Picklists | Method Picklist | 12/16/2003 | | The pick list for the field Method is: Electroshocking (Single Pass), Electroshocking (Multi-Pass), Hand Seining, Hook and Line, Long Standing Natural Barrier, Screw Trap, Snorkeling, Using Spawning Survey, Visual, Weir Adult Trap, <u>Other</u> | | |
| 24 | 82 | Fish | General Survey | All | Informational | Method: Other | 12/16/2003 | | If a user selects "Other" for Protocol, the Method should be noted in the comments. This process should be described in the ARIMS data dictionary and User's Handbook. | | |

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| 25 | 91 | Fish | General Survey | All | Picklists | Survey Method/Protocol Pick list | 12/16/2003 | | The ability at the State Office Data Steward/team level to add new protocols to the Survey Method/Protocol pick list after standing user group approves the request. | Need Input: Does there need to be a Level 4 value for Species? | |
| 26 | 111 | Fish | Habitat Quality | Reach Type | | Habitat Quality Level 1 | | | The system shall support entry and update for Habitat Quality reaches by quality ranking. | | |
| 27 | 31 | Fish | Habitat Quality | Reach Type | | Habitat Quality Level 2 Values | 12/16/2003 | | Habitat Quality reaches should have the following Level 2 values: Good, Fair, and Poor. | | |
| 28 | 32 | Fish | Habitat Quality | Reach Type | Informational | Habitat Quality Level 3 & 4 Values | 12/16/2003 | | There are no Level 3 or Level 4 values for Habitat Quality reaches. | | |
| 29 | 34 | Fish | Habitat Quality | Reach Type | Informational | Habitat Quality Reaches - Description | 12/16/2003 | | Habitat Quality reaches are qualitative assessments made for fish purposes. They are based on quantitative habitat survey data and are determined by using the ODFW | | |
| 30 | 112 | Fish | Misc | | | Streamlined Data Entry | | | The Fish module shall be designed to streamline data entry and minimize duplicate data entry. | | |
| 31 | 113 | Fish | Misc | | | User Friendly Interface | | | The Fish module shall be designed to be user friendly. | Need Input: What functionality is needed: data import, manual entry or the ability to link? More specific information is needed on what the users would like to import from or link to. | |
| 32 | 5 | Fish | Population Measu | All | | External Data Sources | 12/16/2003 | | Ability to get data from other sources. | | |
| 33 | 6 | Fish | Population Measu | AUC-Redd Count | Excel Spreadsh | Hatchery/Wild on spreadsheet | 12/16/2003 | | Ability to record Origin (hatchery or wild) on the spreadsheet. Data element will not be stored in the database and it is not used in any calculation. | | |
| 34 | 7 | Fish | Population Measu | AUC-Redd Count | Data Element | Jacks | 12/16/2003 | | The ability to record the number of jacks, but they should not be included in the AUC population. | | |
| 35 | 9 | Fish | Population Measu | AUC-Redd Count | Data Element | Number of Disturbed Redds | 12/16/2003 | | Redd Count should provide the ability to put a field on the excel spreadsheet for noting the disturbance type and count. | | |
| 36 | 8 | Fish | Population Measu | AUC-Redd Count | Informational | Process for counting | 12/16/2003 | | For AUC Redd Count, each redd should be counted once and flagged. This follows the current handbook for AUC Redd Count. | | |
| 37 | 71 | Fish | Population Measu | AUC-Redd Count | Informational | Westside Method | 12/16/2003 | | For Population Measures, AUC is done exclusively on the Westside. | Multiple pass deferred to later release | |
| 38 | 49 | Fish | Population Measu | Multiple Pass | Calculation | Multiple Pass Calculations | 12/16/2003 | | On the multiple pass there are some calculations that could be supported in ARIMS. Same for some snorkeling that is backed up by some electroshocking. (Note: This needs follow-up investigation). | | |

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| 39 | 47 | Fish | Population Measure | One Day Survey | Informational | Eastside Method | 12/16/2003 | | For Population Measures, Redd Count is done occasionally on the Eastside. | Need Input: 1. Is age class needed? 2. Protocols are needed for One Day Surveys. | |
| 40 | 41 | Fish | Population Measure | One Day Survey | | Field Conditions | 12/16/2003 | | System shall provide the ability to record Field Conditions for all surveys. | | |
| 41 | 12 | Fish | Population Measure | One Day Survey | Data Elements | One Day Survey Data Elements | 12/16/2003 | | Data elements applicable for One Day Surveys include: Peak (timing code), Redds (intact, disturbed, total), Adults, Males (by Hatchery or Wild), Females (by Hatchery or Wild), Jacks (by Hatchery or Wild), Carcass, Species | | |
| 42 | 42 | Fish | Population Measure | One Day Survey | Informational | One Day Surveys | 12/16/2003 | | Peak Surveys should be referred to as One Day Surveys. The fish handbook should be updated to reflect this. | | |
| 43 | 43 | Fish | Population Measure | One Day Survey | Informational | Reach Based | 12/16/2003 | | One day surveys are reach based. | | |
| 44 | 11 | Fish | Population Measure | One Day Survey | Informational | Redd Count Survey | 12/16/2003 | | Redd Count is a part of AUC, but there is also a separate Redd Count survey. The Redd Count is done at peak or after peak. | | |
| 45 | 13 | Fish | Population Measure | One Day Survey | Informational | Redd Count Survey Purpose | 12/16/2003 | | The purpose of the Redd Count is to get a count of redds along a reach. The data is typically used to compare density of redds on a reach from year to year. | | |
| 46 | 55 | Fish | Population Measure | Population | Data Elements | Population Measure Data Elements | 12/16/2003 | | For Population Measure Surveys, the ability to record density per habitat unit (derived value). | Functionality deferred. | |
| 47 | 56 | Fish | Population Measure | Population | | Population Measure Data Elements | 12/16/2003 | | For Population Measure surveys, the ability to record spawning density (derived value). | Functionality deferred. | |
| 48 | 57 | Fish | Population Measure | Population | | Population Measure Data Elements | 12/16/2003 | | For Population Measure Surveys, the ability to record biomass (derived value). | Functionality deferred. | |
| 49 | 58 | Fish | Population Measure | Population | | Population Measure Data Elements | 12/16/2003 | | For Population Measure Surveys, the ability to record population (derived value). | Functionality deferred. | |
| 50 | 59 | Fish | Population Measure | Population | | Population Measure Data Elements | 12/16/2003 | | For Population Measure Surveys, the ability to record abundance. | Functionality deferred. | |
| 51 | 60 | Fish | Population Measure | Population | | Population Measure Data Elements | 12/16/2003 | | For Population Measure Surveys, the ability to calculate length frequency (derived value). | | |
| 52 | 61 | Fish | Population Measure | Population | Informational | Relative Abundance | 12/16/2003 | | Abundance is defined as a one time count (single effort). Repeated efforts over time to the same stream would provide relative abundance. Can also compare two different streams on the same day to provide relative abundance. | | |
| 53 | 63 | Fish | Population Measure | Population | | Relative Abundance | 12/16/2003 | | The ability to compare relative abundance population numbers between two streams. | Need Input: What is the output needed? A report, a map, a table, other? | |
| 54 | 66 | Fish | Population Measure | Population | Informational | Survey Duration | 12/16/2003 | | Population Surveys may have duration of one or more days. | Functionality deferred. | |
| 55 | 70 | Fish | Population Measure | Population | Informational | Weirs & Traps | 12/16/2003 | | Raw legacy data for weirs and traps will be kept at ODFW; ARIMS should only hold the summary data. | | |

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| 1 | ReqID | ARIMS Measure | Category | SubCategory | Component | ShortDescription | DateEntered | DateCompleted | LongDescription | Comments | Reviewer Comments |
| 56 | 16 | Fish | Population Measure | Spawning Survey | Informational | Spawning Surveys | 12/16/2003 | | Spawning Survey types include: Area Under the Curve (AUC) including AUC Redd counts (multiple days), and ODFW Redd Counts (peak or after-peak - one day). | Need Input: 1. Protocols are needed for all types except AUC. 2. Are these the correct survey types? | |
| 57 | 93 | Fish | Population Measure | Spawning Survey | Informational | Survey Method | 12/16/2003 | | There are four reach based survey types for Spawning Surveys: Redd, AUC, Emap (OWEB), and One Day Surveys. | | |
| 58 | 97 | Fish | Population Measure | Weirs | Informational | Sites | 12/16/2003 | | Weir data is site based data that pertains to a sub-watershed or reach. | | |
| 59 | 98 | Fish | Population Measure | Weirs | Data Elements | Surveys | 12/16/2003 | | The ability to store the summary data from <u>adult and juvenile traps</u> . | | |
| 60 | 44 | Fish | Population Measures | | Data Elements | Other Pop Survey Data | 12/16/2003 | | The system will support the entry of other <u>population survey data</u> . | | |
| 61 | 54 | Fish | Population Measures | | Data Elements | Population Measure Data Elements | 12/16/2003 | | For Population Measure Surveys, the ability to record length/weight (measured value). | | |
| 62 | 72 | Fish | Presence Absence | Reach Type | Informational | Absence Not Verified | 12/16/2003 | | Absence Not Verified is described as "best professional judgment suggests absence." | | |
| 63 | 73 | Fish | Presence Absence | Reach Type | Informational | Absence Not Verified | 12/16/2003 | | Absence Not Verified is not protocol dependent. Value for protocol should be "Other." | | |
| 64 | 108 | Fish | Presence Absence | Reach Type | | Fish Anad/Verification/Run/Species | | | System shall support entry and update of anadromous populations reaches by run/season and species (including <u>Ecologically Significant Units</u>). | | |
| 65 | 107 | Fish | Presence Absence | Reach Type | | Fish Resident/Verification/Species | | | System shall support entry and update of resident population reaches by verification <u>status and species</u> . | | |
| 66 | 110 | Fish | Presence Absence | Reach Type | | Pres Abs Run Codes | | | The run codes for Anad Fish are Spring, Summer, Fall, Winter and Other. | Need Input: Approval is needed for the Presence Absence protocols from field office fish biologists. | |
| 67 | 109 | Fish | Presence Absence | Reach Type | | Pres Abs Verification Status Codes | | | The verification status codes for Presence Absence reaches are: Presence Verified, Presence Not Verified, Absence Not Verified, <u>Absence Verified</u> . | | |
| 68 | 84 | Fish | Presence Absence | Reach Type | Informational | Presence Not Verified | 12/16/2003 | | Presence Not Verified is described as "best professional judgment suggests presence." | | |
| 69 | 85 | Fish | Presence Absence | Reach Type | Informational | Presence Not Verified | 12/16/2003 | | Presence Not Verified is not protocol dependent. The value for protocol should be "Other". | | |
| 70 | 86 | Fish | Presence Absence | Reach Type | Informational | Presence Verified | 12/16/2003 | | Presence Verified is described as "field verified/observed by a reputable fish biologist." | Need Input: Approval is needed for the Presence Absence protocols from field office fish biologists. | |
| 71 | 87 | Fish | Presence Absence | Reach Type | Informational | Presence Verified | 12/16/2003 | | Presence Verified is protocol dependent. | | |
| 72 | 39 | Fish | Presence Absence | Site Type | | Incidental Data | 12/16/2003 | | A site type is needed to represent incidental data. | Follow up needed: Is this really needed? If so, more details are needed. | |

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| 73 | 94 | Fish | Study Site | | | AREMP Study Sites | 12/16/2003 | | The ability to determine where AREMP data has been collected (study sites). | Need Input: The user group needs to confirm this is a business need. Need Input: Need confirmation that this is a business need. Follow up needed: the details for this requirement need further investigation. Deferred Follow up needed: the details for this requirement need further investigation. Follow up needed: User group needs to review and possibly revise existing fish barrier site types in ARIMS. Will be part of expected Temperature revision. | |
| 74 | 95 | Fish | Study Site | | | EMAP Study Sites | 12/16/2003 | | The ability to record a Study Site type of OWEB Coho Monitoring (EMAP). The result is redds per mile. | | |
| 75 | 100 | Fish | | | | FWS/NOAA Fisheries Matrix | 12/16/2003 | | The ability to complete the FWS/NOAA Fisheries matrix. | | |
| 76 | 105 | Fish | | | | Telemetry Surveys | 12/16/2003 | | The ability to record summary data for telemetry surveys. | | |
| 77 | 40 | ODFW | | | Data Import | New Surveys | 12/16/2003 | | Ability to enter new ODFW surveys (completed by BLM employees) into ARIMS. | | |
| 78 | 15 | Site Mainte | Site Type | | | Redd Sites | 12/16/2003 | | A site type is needed to mark location of redds. | | |
| 79 | 17 | Site Mainte | Site Type | | | Revise Fish Barrier Site Type | | | To be determined. | | |
| 80 | 96 | Water Qua | Temperature | | Data Element | Spawning Time Period | 12/16/2003 | | The ability to record if a Water Temperature Survey is completed during spawning time period. | | |